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10/081,870	02/22/2002	William E. Bardwell	59718	9894

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EXAMINER

PERUNGAVOOR, SATHYANARAYA V

ART UNIT PAPER NUMBER

2625

DATE MAILED: 01/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/081,870	Applicant(s) BARDWELL, WILLIAM E.	
	Examiner Sath V. Perungavoor	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 May 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>03/22/02</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Duty of Disclosure

[1] The following is a quotation of the appropriate paragraphs of 37 CFR 1.56:

(a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is cancelled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is cancelled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§ 1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:

- (1) Prior art cited in search reports of a foreign patent office in a counterpart application, and
- (2) The closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.

(b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and

- (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or
- (2) It refutes, or is inconsistent with, a position the applicant takes in:
 - (i) Opposing an argument of unpatentability relied on by the Office, or
 - (ii) Asserting an argument of patentability.

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

(c) Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:

- (1) Each inventor named in the application;
- (2) Each attorney or agent who prepares or prosecutes the application; and
- (3) Every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.

(d) Individuals other than the attorney, agent or inventor may comply with this section by disclosing information to the attorney, agent, or inventor.

(e) In any continuation-in-part application, the duty under this section includes the duty to disclose to the Office all information known to the person to be material to patentability, as defined in paragraph (b) of this section, which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

- Examiner respectfully requests the applicant(s) to disclose any patents and/or applications that may be material to a double patenting rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

[2] Claims 1, 2, 4-6, 8, 9 and 29-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Gagne et al. (“Gagne”) [US 6,212,290].

Regarding claim 1, Gagne meets all the claim limitations, as follows:

A method for storing biometric information on a token comprising a magnetic storage medium [Title], the method comprising: capturing a biometric image and generating therefrom digital pixel data for an array of image pixels [Column 7 Lines 51-55]; selecting a plurality of spaced apart sets of image pixels from the array of image pixels [Column 9 Lines 25-32]; processing respective sets of digital pixel data for the selected spaced apart sets of image pixels to produce biometric data [Column 10 Lines 17-22]; and storing the biometric data on the magnetic storage medium of the token [Column 15 Lines 19-30].

Regarding claim 2, Gagne meets all the claim limitations, as follows:

The method according to claim 1, wherein capturing the biometric image comprises using a biometric sensor having a sensing area [*Column 7 Lines 16-22*]; and wherein selecting the plurality of spaced apart sets of image pixels comprises selecting a reference set of image pixels based upon a predetermined location on the sensing area [*XC or YC*], and selecting at least one other set of image pixels a predetermined distance [$XC \pm DIFF$ or $YC \pm DIFF$] from the predetermined location [*Column 9 Lines 55-57*].

Regarding claim 4, Gagne meets all the claim limitations, as follows:

The method according to claim 1, wherein capturing the biometric image comprises capturing multiple biometric images until a preferred biometric image is captured based upon an image quality threshold [*Column 9 Lines 5-22*].

Regarding claim 5, Gagne meets all the claim limitations, as follows:

The method according to claim 1, wherein each set of image pixels comprises a series of consecutive and colinear image pixels [*Figure 10b*].

Regarding claim 6, Gagne meets all the claim limitations, as follows:

The method according to claim 1, wherein the biometric information is based upon a fingerprint [*Title*]; and wherein capturing the biometric image comprises capturing the biometric image using a fingerprint sensor [*Column 7 Lines 16-22*].

Regarding claim 8, Gagne meets all the claim limitations, as follows:

The method according to claim 1, wherein the token comprises a generally rectangular substrate *[Figure 3]*.

Regarding claim 9, Gagne meets all the claim limitations, as follows:

The method according to claim 1, wherein the token comprises at least one of an access card, credit card, debit card, frequent flyer card, driver's license card, identification card and smart card *[Column 15 Lines 45-67]*.

Regarding claims 29-32 all claimed limitations are set forth and rejected as per discussion for claims 1, 2, 5 and 6.

[3] Claims 10-13, 15, 18, 19, 21 and 24-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Abtahi et al. ("Abtahi") [US 5,509,083].

Regarding claim 10, Abtahi meets all the claim limitations, as follows:

A method of regulating the use of a token, the token comprising a magnetic storage medium having biometric data of an authorized token user stored thereon, the biometric data comprising selected spaced apart sets of image pixels from an array of image pixels of an enrollment biometric image, the method comprising *[Figure 1]*: capturing a verification biometric image *[Column 6 Lines 6-10]* and generating digital pixel data for an array of image pixels from the verification biometric image *[Column 6 Lines 40-44]*; decoding the biometric data stored on the magnetic storage medium

of the token *[Column 7 Lines 32-44]*; and comparing the spaced apart sets of image pixels from the decoded biometric data with the digital pixel data for the array of image pixels from the verification biometric image to determine if the token holder is the authorized token user *[Column 8 Lines 38-67]*.

Regarding claim 11, Abtahi meets all the claim limitations, as follows:

The method according to claim 10, wherein capturing the verification biometric image comprises using a biometric sensor having a sensing area *[Figure 5]*; and wherein comparing the spaced apart sets of image pixels comprises a bit by bit comparison of one of the spaced apart sets of image pixels from the magnetic storage medium with the array of image pixels from the verification biometric image beginning at a first scanline and continuing to a last scanline until a match is found *[Column 8 Lines 34-44]*.

Regarding claim 12, Abtahi meets all the claim limitations, as follows:

The method according to claim 10, wherein each set of image pixels comprises a series of consecutive and colinear image pixels *[Column 6 Lines 40-44]*.

Regarding claim 13, Abtahi meets all the claim limitations, as follows:

The method according to claim 10, wherein the biometric information is based upon a fingerprint *[Column 5 Lines 55-57]*; and wherein capturing the biometric image comprises capturing the biometric image using a fingerprint sensor *[Figure 5]*.

Regarding claim 15, Abtahi meets all the claim limitations, as follows:

A method of regulating the use of a token, the token comprising at least one of an access card, credit card, debit card, identification card and smart card, and including at least a magnetic storage medium thereon *[Figure 1; Column 13 Lines 11-13]*, the method comprising: enrolling an authorized token user *[Figure 2]* by capturing a first biometric image and generating therefrom first digital pixel data for a first array of image pixels *[132 and 48 on Figure 2]*, selecting a first plurality of spaced apart sets of image pixels from the first array of image pixels *[110 and 118 on Figure 2]*, processing respective sets of digital pixel data for the first plurality of selected spaced apart sets of image pixels to produce enrollment biometric data *[112 of Figure 2]*, and storing the enrollment biometric data on the magnetic storage medium of the token *[120 on Figure 2; Column 7 Lines 45-65]*; and verifying an identity of a token holder presenting the token *[Figure 1]* by capturing a second biometric image and generating therefrom second digital pixel data for a second array of image pixels *[48 and 78 on Figure 1]*, and comparing the second digital pixel data with the first plurality of selected spaced apart sets of image pixels of the enrollment biometric data stored on the magnetic storage medium of the token to determine if the token holder is the authorized token user *[104 and 92 on Figure 1]*.

Regarding claims 18, 19, 24 and 25 all claimed limitations are set forth and rejected as per discussion for claims 12 and 13.

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Regarding claim 21 all claimed limitations are set forth and rejected as per discussion for claim 15.

Regarding claim 26, Abtahi meets all the claim limitations, as follows:

The system according to claim 25, wherein the biometric sensor device further comprises a finger slide adjacent the fingerprint sensor [38 on Figure 5].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

[4] Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gagne in view of Abtahi.

Regarding claim 3, Gagne meets the claim limitations as set forth in claim 2.

Gagne does not explicitly disclose the following claim limitations:

The method according to claim 2, wherein the location of the reference set of image pixels is also stored on the magnetic storage medium.

However, in the same field of endeavor Abtahi discloses the deficient claim limitations, as follows:

The method according to claim 2, wherein the location of the reference set of image pixels is also stored on the magnetic storage medium [*Column 7 Lines 39-53*].

Gagne and Abtahi are combinable because they are from the same field of fingerprint-based verification.

It would have been obvious to one with ordinary skill in the art at the time of invention to modify the teachings of Gagne with Abtahi to store the locations of pixels in the magnetic storage, the motivation being to obtain high correlation when comparison is performed [*Abtahi: Column 7 Lines 50-53*]

[5] Claims 7 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gagne in view of Lu et al. ("Lu") [US 5,432,864].

Regarding claim 7, Gagne discloses the following claim limitations:

The method according to claim 1, wherein the token comprises a card corresponding to the ISO/IEC 7810 standard [*Figure 3*] and the magnetic storage medium comprises a magnetic stripe having three tracks in accordance with the ISO/IEC 7811 standard [*Column 15 Lines 40-42*]; and

Gagne does not explicitly disclose the following claim limitations:

wherein storing the biometric data comprises storing the biometric data on the third track.

However, in the same field of endeavor Lu discloses the deficient claim limitations, as follows:

wherein storing the biometric data comprises storing the biometric data on the third track [*Column 8 Lines 56-60*].

Gagne and Lu are combinable because they are from the same field of biometric verification.

It would have been obvious to one with ordinary skill in the art at the time of invention to modify the teachings of Gagne with Lu to store the biometric data in the third track, the motivation being tracks 1 and 2 are being used to store name and PIN [*Lu: Column 4 Lines 16-26*].

Regarding claim 35 all claimed limitations are set forth and rejected as per discussion for claim 7.

[6] Claims 14, 20 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abtahi in view of Lu.

Regarding claim 14, Abtahi meets the claim limitations as set forth in claim 10.

Abtahi does not explicitly disclose the following claim limitations:

The method according to claim 10, wherein the magnetic storage medium comprises a magnetic stripe having three tracks in accordance with the ISO/IEC 7810 and 7811 standards; and wherein the biometric data is stored on the third track.

However, in the same field of endeavor Lu discloses the deficient claim limitations, as follows:

The method according to claim 10, wherein the magnetic storage medium comprises a magnetic stripe having three tracks in accordance with the ISO/IEC 7810 and

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7811 standards [*Column 3 Line 60-Column 4 Line 3*]; and wherein the biometric data is stored on the third track [*Column 8 Lines 56-60*].

Abtahi and Lu are combinable because they are from the same field of biometric verification.

It would have been obvious to one with ordinary skill in the art at the time of invention to modify the teachings of Abtahi with Lu to store the biometric data in the third track, the motivation being tracks 1 and 2 are being used to store name and PIN [*Lu: Column 4 Lines 16-26*].

Regarding claims 20 and 28 all claimed limitations are set forth and rejected as per discussion for claim 14.

[7] Claims 16, 17, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abtahi in view of Gagne.

Regarding claim 16, Abtahi meets the claim limitations as set forth in claim 15.

Abtahi does not explicitly disclose the following claim limitations:

The method according to claim 15, wherein capturing the biometric images comprises using a biometric sensor having a sensing area; and wherein selecting the plurality of spaced apart sets of image pixels comprises selecting a reference set of image pixels based upon a predetermined location on the sensing area, and selecting at least one other set of image pixels a predetermined distance from the predetermined location.

However, in the same field of endeavor Gagne discloses the deficient claim limitations, as follows:

The method according to claim 15, wherein capturing the biometric image comprises using a biometric sensor having a sensing area [*Column 7 Lines 16-22*]; and wherein selecting the plurality of spaced apart sets of image pixels comprises selecting a reference set of image pixels based upon a predetermined location on the sensing area [*XC or YC*], and selecting at least one other set of image pixels a predetermined distance [$XC \pm DIFF$ or $YC \pm DIFF$] from the predetermined location [*Column 9 Lines 55-57*].

Abtahi and Gagne are combinable because they are from the same field of fingerprint verification.

It would have been obvious to one with ordinary skill in the art at the time of invention to modify the teachings of Abtahi with Gagne to define a window, the motivation being reduction in data size [*Gagne: Column 2 Lines 3-7*]

Regarding claim 17, Abtahi meets the claim limitations as set forth in claim 15.

Abtahi does not explicitly disclose the following claim limitations:

The method according to claim 15, wherein capturing the biometric images comprises capturing multiple biometric images until a preferred biometric image is captured based upon an image quality threshold.

However, in the same field of endeavor Gagne discloses the deficient claim limitations, as follows:

The method according to claim 15, wherein capturing the biometric image comprises capturing multiple biometric images until a preferred biometric image is captured based upon an image quality threshold [*Column 9 Lines 5-22*].

Abtahi and Gagne are combinable because they are from the same field of fingerprint verification.

It would have been obvious to one with ordinary skill in the art at the time of invention to modify the teachings of Abtahi with Gagne to include a quality threshold, the motivation being to obtain accurate verification from good quality images [*Gagne: Column 9 Lines 5-22*].

Regarding claims 22 and 23 all claimed limitations are set forth and rejected as per discussion for claims 16 and 17.

[8] Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abtahi in view of Sibbald et al. ("Sibbald") [US 5,412,463].

Regarding claim 27, Abtahi meets the claim limitations as set forth in claim 26 and further discloses the following claim limitations:

The system according to claim 26, wherein the finger slide further comprises finger guides [*38 on Figure 5*].

Abtahi does not explicitly disclose the following claim limitations:

The system according to claim 26, wherein the finger slide further comprises finger guides and a finger stop.

However, in the same field of endeavor Sibbald discloses the deficient claim limitations, as follows:

The system according to claim 26, wherein the finger slide further comprises finger guides [6,8, 14 and 16 on Figure 1] and a finger stop [10 on Figure 1].

Abtahi and Sibbald are combinable because they are from the same field of fingerprinting.

It would have been obvious to one with ordinary skill in the art at the time of invention to modify the teachings of Abtahi with Sibbald to incorporate finger guides and stop, the motivation being to obtain proper alignment [Column 1, Lines 36-41].

[9] Claims 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gagne in view of Sibbald.

Regarding claims 33 and 34, Gagne meets the claim limitations as set forth in claim 32.

Gagne does not explicitly disclose the following claim limitations:

The device according to claim 32, wherein the biometric sensor device further comprises a finger slide adjacent the fingerprint sensor.

The device according to claim 33, wherein the finger slide comprises finger guides and a finger stop.

However, in the same field of endeavor Sibbald discloses the deficient claim limitations, as follows:

The device according to claim 32, wherein the biometric sensor device further comprises a finger slide adjacent the fingerprint sensor [14 and 16 on Figure 1].

The system according to claim 33, wherein the finger slide further comprises finger guides [6,8, 14 and 16 on Figure 1] and a finger stop [10 on Figure 1].

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Gagne and Sibbald are combinable because they are they are from the same field of fingerprinting.

It would have been obvious to one with ordinary skill in the art at the time of invention to modify the teachings of Gagne with Sibbald to incorporate finger guides and stop, the motivation being to obtain proper alignment [*Column 1, Lines 36-41*].

Contact Information

[10]. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mr. Sath V. Perungavoor whose telephone number is (571) 272-7455. The examiner can normally be reached on Monday to Friday from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Bhavesh M. Mehta whose telephone number is (571) 272-7453, can be reached on Monday to Friday from 9:00am to 5:00pm. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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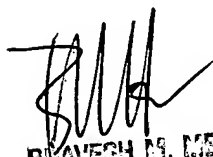
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Dated: January 6, 2006

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